**List of CET Deptt. labs.**

|  |  |  |
| --- | --- | --- |
| **S.No.** | **Laboratory Name** | **Dedicated/Shared** |
|  | Drawing Lab | Dedicated |
|  | Environmental Lab | Dedicated |
|  | Geotechnical Lab | Dedicated |
|  | Transportation Lab | Dedicated |
|  | Fluid Lab | Dedicated |
|  | Survey Lab | Dedicated |
|  | Applied Mechanics Lab | Dedicated |
|  | Concrete Lab | Dedicated |
|  | Material Testing Lab | Dedicated |

**Labs Inventory**

**Of Civil Labs**

1. **Drawing Lab**

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Equipment/ Instrument** | **Quantity** |
| 1 | Drawing tables | 40 |
| 2 | Drawing stools | 40 |

1. **Environmental Lab**

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Equipment/ Instrument** | **Quantity** |
|  | CoD Apparatus | 1 |
|  | BoD Apparatus | 1 |
|  | Portable Turbidity Meter | 1 |
|  | Digital Drying Oven | 1 |
|  | Analytical Balance (210 gm X 0.1mg) | 1 |
|  | Digital pH & Conductivity/TDS Meter | 1 |
|  | Burette | 1 |
|  | Pipet | 1 |
|  | Glassware set | 1 |
|  | Chemicals | 30 |

1. **Geotechnical Lab**

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| **Sr. No.** | **Equipment/ Instrument** | **Quantity** |
| 1 | Digital Lab Oven Capacity 100 Liter | 1 |
| 2 | Speedy Moisture Tester (6gm) | 2 |
| 3 | Fine Sieve Set (8” steel) | 1 |
| 4 | Coarse Sieve Set (8” steel) | 1 |
| 5 | Standard Proctor Set (4” Dia Mould + 5.5 Lbs Hammer) | 1 |
| 6 | Modified Proctor Set 6” Moulds | 1 |
| 7 | Core Cutter Apparatus 4” Dia, 5” Height | 1 |
| 8 | Sand Cone Apparatus 6” Dia (Cone + Base Plate + Plastic Bottles) | 2 |
| 9 | Shrinkage Limit Apparatus | 1 |
| 10 | Liquid Limit Apparatus | 1 |
| 11 | Plastic Limit Apparatus | 1 |
| 12 | High speed stirrer | 7 |
| 13 | Hydrometer 152 H set | 5 |
| 14 | Digital Balance (20kg capacity) | 1 |
| 15 | Digital Balance (2kg capacity) | 1 |
| 16 | Soil mixing Tray (Small) | 2 |
| 17 | Soil mixing Tray (Large) | 2 |
| 18 | Rubber Hammer | 1 |
| 19 | Steel Hammer | 1 |
| 20 | Chisel | 1 |
| 21 | Wash Bottle | 1 |
| 22 | Density Bottle (25 ml) | 1 |
| 23 | Density Bottle (50 ml) | 1 |
| 24 | Density Bottle (100 ml) | 1 |
| 25 | Pycnometer (250 ml) | 1 |
| 26 | Pycnometer (500 ml) | 1 |
| 27 | Wash sieve | 1 |
| 28 | Wire Bucket | 1 |
| 29 | Steel Bowl | 1 |
| 30 | Steel Trowel | 1 |
| 31 | Scoop | 1 |
| 32 | Sodium Hexametaphosphate (NaPO3)6 | 1kg |
| 33 | Calcium carbide (CaC2) | 450gm |
| 34 | Mercury | 500gm |
| 35 | Unconfined Testing Machine | 1 |
| 36 | Consolidation Test | 1 |
| 37 | Direct shear Test Machine | 01 |
| 38 | Proctor Penetrometer | 01 |
| 39 | Sieve Shaker Electromagnetic | 01 |

1. **Transportation Lab**

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| --- | --- | --- |
| **Sr. No.** | **Equipment/ Instrument** | **Quantity** |
|  | Flakiness & Elongation Apparatus | 1 |
|  | Flash & Fire Point Apparatus | 1 |
|  | Softening Point Ring Ball Apparatus | 1 |
|  | CBR Test machine along with accessories | 1 |
|  | Digital Asphalt Viscometer | 1 |
|  | Plate Load Test | 1 |
|  | Specific Gravity of Course aggregates by SSD Method | 1 |
|  | Universal Sample Extruder | 1 |
|  | Loss Angeles Abrasion Machine | 1 |

1. **Fluid Mechanics lab**

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Equipment/ Instrument** | **Quantity** |
|  | Hydraulic Bench | 4 |
|  | Bernoulli’s Theorem demonstration apparatus | 2 |
|  | Dead Weight Tester | 2 |
|  | Reynold’s Number Apparatus | 1 |
|  | Orifice Discharge Apparatus | 1 |
|  | Pitot Tube Apparatus | 1 |
|  | Friction in Pipes Apparatus | 1 |
|  | Impact of Jet Apparatus | 1 |
|  | Hydrostatic Pressure Apparatus | 1 |
|  | Free & Forced vertex apparatus | 1 |
|  | Flow over Notch channel apparatus | 1 |
|  | Francis Turbine | 1 |
|  | Pelton Wheel Turbine | 1 |
|  | Hydraulic Ram Apparatus | 1 |

1. **Survey lab**

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| --- | --- | --- |
| **Sr. No.** | **Equipment/ Instrument** | **Quantity** |
| 1 | Plan table along with a tripod, Trough compass, U fork, Spirit level | 3 |
| 2 | Abney Level (5”) | 3 |
| 3 | Prismatic compass | 3 |
| 4 | Theodolite | 1 |
| 5 | GPS | 3 |
| 6 | Ranging rods | 20 |
| 7 | Steel Arrows | 20 |
| 8 | cross-staff | 3 |
| 9 | Level machine | 3 |
| 10 | Alidade Brass 18” | 10 |
| 11 | Alidade Brass 12” | 10 |
| 12 | Chains 100ft | 10 |
| 14 | Staves Leveling staff (Aluminum) | 15 |
| 15 | Tapes 30m/100ft | 10 |
| 16 | Optical squares (Stanley) double pattern | 10 |

**7. Applied Mechanics lab**

|  |  |  |
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| **S.No.** | **Equipment/ Instrument** | **Quantity** |
|  | Universal Force Table (Polygon of Forces) | 1 |
|  | Hook's Law Apparatus | 1 |
|  | Friction on an Inclined Plane Apparatus | 1 |
|  | Fly Wheel Apparatus | 1 |
|  | Vernier Caliper | 2 |
|  | Screw Gauge | 2 |
|  | Toggle Joint apparatus | 1 |
|  | Jib Crane Apparatus | 1 |
|  | Moment Apparatus | 1 |
|  | Spring Balance Apparatus | 2 |
|  | Torsion testing machine | 1 |
|  | Beam deflection Apparatus | 2 |
|  | Strut Apparatus | 1 |
|  | Curved Bar Apparatus | 1 |
|  | Roof Truss apparatus | 1 |

1. **Concrete lab**

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Equipment/ Instrument** | **Quantity** |
|  | Oven | 1 |
|  | Aggregate impact apparatus | 2 |
|  | Digital Balance 6 Kg x 0.1 g | 1 |
|  | ASTM Sieve set | 5 |
|  | Le-Chatlier Mould | 2 |
|  | Soundness Test Water Bath | 4 |
|  | Capping Apparatus for 15 cm Side | 2 |
|  | Moulds Cube 15 cm/side | 20 |
|  | Moulds Cube 10 cm/side | 8 |
|  | Blaine apparatus | 2 |
|  | Temperature controlled curing tank | 1 |
|  | Vicat Apparatus | 2 |
|  | Compaction Factor apparatus | 2 |
|  | Slump cone apparatus | 2 |
|  | Concrete Mixer | 1 |
|  | concrete Vibrating Table | 1 |
|  | Sieve Shaker Electromagnetic | 1 |
|  | Heavy Duty Digital Balance | 1 |
|  | Air Entrainment Meter | 1 |
|  | Compressometer-Extensometer | 1 |
|  | Cylinder Mould | 20 |

1. **Material Testing Lab**

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Equipment/ Instrument** | **Quantity** |
| 1 | Universal Testing Machine (UTM) | 1 |
| 2 | Extensometer | 1 |

**Labs Inventory (Furniture)**

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Equipment/ Instrument** | **Quantity** |
| 1 | Revolving chairs | 8 |
| 2 | Show case | 10 |
| 3 | Cupboards /Almirah | 8 |
| 4 | Stools | 250 |
| 5 | Demonstration tables | 8 |
| 6 | Teacher’s table | 8 |
| 7 | Rostrum | 7 |